

## Faceting 101 - Lesson 4

### Teaching Trillion

by Arya Akhavan (October 2012)

Angles for R.I. = 1.720

34 + 12 girdles = 46 facets

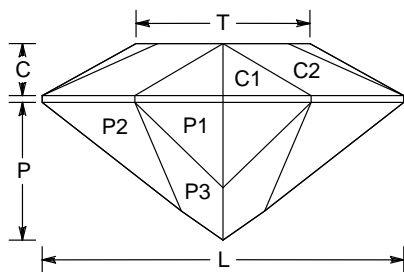
3-fold, mirror-image symmetry

96 index

$L/W = 1.018$   $T/W = 0.489$   $U/W = 0.486$

$P/W = 0.388$   $C/W = 0.146$

$Vol./W^3 = 0.161$



### PAVILION

P1	44.04°	02-30-34-62-66-94	Cut to centerpoint.
P2	42.00°	05-27-37-59-69-91	Meet at culet.
G1	90.00°	02-30-34-62-66-94	Set stone size.
G2	90.00°	05-27-37-59-69-91	Level girdle.
P3	42.50°	03-29-35-61-67-93	Meet P1, P2, G1, G2

### CROWN

C1	40.00°	02-30-34-62-66-94	Set girdle width.
C2	34.19°	05-27-37-59-69-91	Level girdle.
C3	23.28°	16-48-80	Meet G2, C2
T	0.00°	Table	Meet C1, C2

Our fourth lesson gets a bit more interesting - now we're cutting a trillion, or a brilliant triangular cushion. This lesson teaches how to cut multiple pavilion facets to the same centerpoint (P1, P2), and how to cut a girdle outline using multiple pavilion facets cut to the same centerpoint (a CAM outline; P1, P2).

Lesson rules: cut in pyrope garnet, with no size restrictions

C:\Program Files (x86)\GemCAD\Designs (Mine)\Teaching Series\Faceting 101 - Lesson 4 - Teaching Trillion.gem